THE AERONAUTICAL JOURNAL

OF THE ROYAL AERONAUTICAL SOCIETY

Volume CVII

January-December 2003

Subject Index

ACOUSTICS

Optimisation of noise abatement arrival trajectories. H.G. Visser and R.A.A. Wijnen, pp 607-615.

AERODYNAMICS

Aerodynamic admittance of a two-dimensional body. A. Filippone and J. Siquier, p 4.

Aerofoil at low speeds with Gurney flaps. L. Brown and A. Filippone, pp 539-546.

Non-linear analysis of stall flutter based on the ONERA aerodynamic model. J. Beedy, G. Barakos, K.J. Badcock and B.E. Richards, pp 496-509.

Seaplane research — the MAEE contribution. J. Hamilton and J.E. Allen, pp 125-148.

The role of CFD in aerodynamics, off-design. P.R. Spalart and D.R. Bogue, pp 323-329.

AEROELASTICITY

'Smart spring' identification for hovering-rotor aeroelastic-stability augmentation. M. Gennaretti, L. Poloni and F. Nitzsche, pp 233-240.

AEROSPACE ENGINEERING

Autonomous behavioural algorithm for space applications. G. Radice and C.R. McInnes, pp 521-527.

Heat transfer and flow behind a step in high enthalpy superorbital flow. M.J. Hayne, D.J. Mee, R.G. Morgan, S.L. Gai and T.J. McIntyre, pp 435-442.

Low cost Mercury orbiter and sample return missions using solar sail propulsion. C.R. McInnes, G. Hughes and M. McDonald, pp 469-478.

AIR TRAFFIC MANAGEMENT

Future air traffic management: strategy and control philosophy. P. Brooker, pp 589-598.

BOOK REVIEWS — BY AUTHOR

Abzug, M.J. and Larrabee, E.E. Airplane Stability and Control: A History of the Technologies That Made Aviation Possible — Second Edition, p 275.

Carden, F. *et al* Telemetry systems engineering, p 62.

Chobotov, V.A. Orbital Mechanics — Third Edition, p 110.

Cooke, A. and Fitzpatrick, E. Helicopter Test and Evaluation, p 574.

Hodges, D.H. and Pierce, G.A. Introduction to Structural Dynamics and Aeroelasticity, p 62.

Liu, G.R. and Quek, S.S. The Finite Element Method: A Practical Course, p 403.

Marciniak, Z. *et al* Mechanics of Sheet Metal Forming, p 274.

Mazumdar, S.K. Composites Manufacturing: Materials, Product and Process Engineering, p 274.

Mueller, T.J. Fixed and Flapping Wing Aerodynamics for Micro Air Vehicle Applications. Progress in Aeronautics and Astronautics — Series Vol 165, p 110.

Nebylov, A.V. and Wilson, P.A. Ekranoplanes: Controlled Flight Close to the Sea, p 274.

O'Connel, P.D.T. *et al* Practical Reliability Engineering — Fourth Edition, p 63.

Oran, E.S. and Boris, J.P. Numerical Simulation of Reactive Flow — Second Edition, p 62.

Quek, S.S. and Liu, G.R. The Finite Element Method: A Practical Course, p 403.

Raymer, D.P. Simplified Aircraft Design for Homebuilder, p 575.

Rivin, E.I. Passive Vibration Isolation, p 574.

THE AERONAUTICAL JOURNAL

OF THE ROYAL AERONAUTICAL SOCIETY

Volume CVII

January-December 2003

Subject Index

ACOUSTICS

Optimisation of noise abatement arrival trajectories. H.G. Visser and R.A.A. Wijnen, pp 607-615.

AERODYNAMICS

Aerodynamic admittance of a two-dimensional body. A. Filippone and J. Siquier, p 4.

Aerofoil at low speeds with Gurney flaps. L. Brown and A. Filippone, pp 539-546.

Non-linear analysis of stall flutter based on the ONERA aerodynamic model. J. Beedy, G. Barakos, K.J. Badcock and B.E. Richards, pp 496-509.

Seaplane research — the MAEE contribution. J. Hamilton and J.E. Allen, pp 125-148.

The role of CFD in aerodynamics, off-design. P.R. Spalart and D.R. Bogue, pp 323-329.

AEROELASTICITY

'Smart spring' identification for hovering-rotor aeroelastic-stability augmentation. M. Gennaretti, L. Poloni and F. Nitzsche, pp 233-240.

AEROSPACE ENGINEERING

Autonomous behavioural algorithm for space applications. G. Radice and C.R. McInnes, pp 521-527.

Heat transfer and flow behind a step in high enthalpy superorbital flow. M.J. Hayne, D.J. Mee, R.G. Morgan, S.L. Gai and T.J. McIntyre, pp 435-442.

Low cost Mercury orbiter and sample return missions using solar sail propulsion. C.R. McInnes, G. Hughes and M. McDonald, pp 469-478.

AIR TRAFFIC MANAGEMENT

Future air traffic management: strategy and control philosophy. P. Brooker, pp 589-598.

BOOK REVIEWS — BY AUTHOR

Abzug, M.J. and Larrabee, E.E. Airplane Stability and Control: A History of the Technologies That Made Aviation Possible — Second Edition, p 275.

Carden, F. *et al* Telemetry systems engineering, p 62.

Chobotov, V.A. Orbital Mechanics — Third Edition, p 110.

Cooke, A. and Fitzpatrick, E. Helicopter Test and Evaluation, p 574.

Hodges, D.H. and Pierce, G.A. Introduction to Structural Dynamics and Aeroelasticity, p 62.

Liu, G.R. and Quek, S.S. The Finite Element Method: A Practical Course, p 403.

Marciniak, Z. *et al* Mechanics of Sheet Metal Forming, p 274.

Mazumdar, S.K. Composites Manufacturing: Materials, Product and Process Engineering, p 274.

Mueller, T.J. Fixed and Flapping Wing Aerodynamics for Micro Air Vehicle Applications. Progress in Aeronautics and Astronautics — Series Vol 165, p 110.

Nebylov, A.V. and Wilson, P.A. Ekranoplanes: Controlled Flight Close to the Sea, p 274.

O'Connel, P.D.T. *et al* Practical Reliability Engineering — Fourth Edition, p 63.

Oran, E.S. and Boris, J.P. Numerical Simulation of Reactive Flow — Second Edition, p 62.

Quek, S.S. and Liu, G.R. The Finite Element Method: A Practical Course, p 403.

Raymer, D.P. Simplified Aircraft Design for Homebuilder, p 575.

Rivin, E.I. Passive Vibration Isolation, p 574.

Tisza, M. Physical Metallurgy for Engineers, p 403.
Ye, J. Laminated Composite Plates and Shells: 3D Modelling, p 575.

BOOK REVIEWS — BY TITLE

Airplane Stability and Control: A History of the Technologies That Made Aviation Possible — Second Edition, M.J. Abzug and E.E. Larrabee, p 275.
Composites Manufacturing: Materials, Product and Process Engineering, S.K. Mazumdar, p 274.
Ekranoplanes: Controlled Flight Close to the Sea, A.V. Nebylov and P.A. Wilson, p 274.
Fixed and Flapping Wing Aerodynamics for Micro Air Vehicle Applications. Progress in Aeronautics and Astronautics — Series Vol 165, T.J. Mueller, p 110.
Helicopter Test and Evaluation, A. Cooke and E. Fitzpatrick, p 574.
Introduction to Structural Dynamics and Aeroelasticity, D.H. Hodges and G.A. Pierce, p 62.
Laminated Composite Plates and Shells: 3D Modelling, J. Ye, p 575.
Mechanics of Sheet Metal Forming, Z. Marciniak *et al*, p 274.
Numerical Simulation of Reactive Flow — Second Edition, E.S. Oran and J.P. Boris, p 62.
Orbital Mechanics — Third Edition, V.A. Chobotov, p 110.
Passive Vibration Isolation, E.I. Rivin, p 574.
Physical Metallurgy for Engineers, M. Tisza, p 403.
Practical Reliability Engineering — Fourth Edition, P.D.T. O'Connel *et al*, p 63.
Simplified Aircraft Design for Homebuilder, D.P. Raymer, p 575.
Telemetry Systems Engineering, F. Carden *et al*, p 62.
The Finite Element Method: A Practical Course, G.R. Liu and S.S. Quek, p 403.

COMPUTATIONAL FLUID DYNAMICS

Curve fitting approach for transonic flutter prediction. A. Sedaghat, J.E. Cooper, J.R. Wright and A.Y.T. Leung, pp 565-572.
The role of CFD in aerodynamics, off-design. P.R. Spalart and D.R. Bogue, pp 323-329.

COMPUTATIONAL TECHNIQUES

A dynamically fuzzy gain — scheduled design for missile autopilot. C.-L Lin and C.-L. Hwang, pp 599-606.
A numerical study of drag reduction by mini-belts in a smooth wall turbulent boundary layer. L. Djenidi, R.A. Antonia and A.M. Savill, pp 559-564.
A numerical study of hypersonic laminar film cooling. X. Yang, K.J. Badcock and B.E. Richards, pp 479-486.
Computational simulation of wing rock in three degrees-of-freedom for a generic fighter with chine-shaped forebody. A.A. Saad and B.S. Liebst , pp 49-56.
Effects of sweep on the dynamics of active separation control. L.G. Pack and A. Seifert, pp 617-629.
Numerical investigation of staged transverse sonic injection in Mach 2 stream in confined environment. D. Chakraborty, A.P Roychowdhury, V. Ashok and P. Kumar, pp 719-729.
Pilot modelling and inverse simulation for initial handling qualities assessment. N. Cameron, D.G. Thomson and D.J. Murray-Smith, pp 511-520.

DESIGN

Breaking the chain — Returning Concorde to service following the Paris accident — July 2000. J.A. Jupp and J.R. Britton, pp 447-458.
The broad delta airliner. R.M. Denning, J.E. Allen and F.W. Armstrong, pp 547-558.

DYNAMICS

An investigation into the longitudinal dynamics and control of a flapping wing micro air vehicle at hovering flight. K. Loh, M. Cook and P. Thomasson, pp 743-753.
An investigation of dynamic stall onset on a pitching wing. A. Ferrecchia, F.N. Coton, R.A.McD. Galbraith and R.B. Green, pp 487-494.
Biologically inspired visual sensing and flight control. G.L. Barrows, J.S. Chahl and M.V. Srinivasan, pp 159-168.
Pilot modelling and inverse simulation for initial handling qualities assessment. N. Cameron, D.G. Thomson and D.J. Murray-Smith, pp 511-520.
Technical Note: Corner speed versus optimum turn speed. A. Kutschera and P.M. Render, pp 443-445.
The birth of flight control — an engineering analysis of the Wright brothers' 1902 glider. G.D. Padfield and B. Lawrence, pp 697-718.

EDITOR'S NOTE

Aerospace — the challenge ahead — a special centennial celebration issue of *The Aeronautical Journal* — an introduction. J. Stollery, pp 278-279.
Introduction: Golden jubilee of the Department of Aerospace Engineering at the University of Glasgow. D. Thomson, pp 460.

ENVIRONMENTAL ENGINEERING

Civil aviation and the environmental challenge. J.E. Green, pp 281-299.
Staged combustor optimisation in the environmental aircraft envelope. A. Wulff and J. Hourmouziadis, pp 263-273.

FLIGHT CONTROL

Non-linearities in flight control systems. C. Fielding and P.K. Flux, pp 673-686.
Physical modelling of a flight control system. S. Sadovnychiy, pp 249-255.

GENERAL AVIATION

Light aviation — past, present and future. A.C. Welch, pp 389-402.

HISTORY

Seaplane research — the MAEE contribution. J. Hamilton and J.E. Allen, pp 125-148.
The birth of flight control — an engineering analysis of the Wright brothers' 1902 glider. G.D. Padfield and B. Lawrence, pp 697-718.
The United Kingdom's contributions to the development of aeronautics. Part 4. The origins of the jet age. , J.A.D. Ackroyd, pp 1-47.

JETS

A study of synthetic jets from rectangular and dual-circular orifices. M. Watson, A.J. Jaworski and N.J. Wood, pp 427-434.

MATERIALS

Materials for airframes. H.M. Flower and C. Soutis, pp 331-341.
Mechanical and electromagnetic behaviour of auxetic honeycomb structures. F. Scarpa, F.C. Smith, B. Chambers and G. Burriesci, pp 175-183.

PROPULSION

Aero engines of the future. P.C. Ruffles, pp 307-321.
The United Kingdom's contributions to the development of aeronautics. Part 4. The origins of the jet age. J.A.D. Ackroyd, pp 1-47.

ROTORCRAFT

Progress in the development of a versatile pilot model for the evaluation of rotorcraft performance, control strategy and pilot workload. R. Bradley and G. Brindley, pp 731-738.

Reduction of helicopter vibration through cyclic control of variable orifice dampers. P. Anusonti-Inthra, F. Gandhi and L. Miller, pp 657-672.

Robotic rotorcraft. R.G. Austin, pp 65-78.

'Smart spring' identification for hovering-rotor aeroelastic-stability augmentation. M. Gennaretti, L. Poloni and F. Nitzsche, pp 233-240.

The future of rotorcraft. G.M. Byham, pp 377-387.

SAFETY

A non-traditional look at safety. M. Gallagher and J.L. Foster, pp 169-174.

Aircraft airworthiness certification standards for civil UAVs. D.R. Haddon and C.J. Whittaker, pp 79-86.

An analysis of human behaviour during aircraft evacuation situations using an AASK v3.0 database. E.R. Galea, K.M. Finney, A.J.P. Dixon, A. Siddiqui and D.P. Cooney, pp 219-231.

Passenger safety in very large transport aircraft. H. Muir and L. Thomas, pp 201-206.

Progress in the development of a versatile pilot model for the evaluation of rotorcraft performance, control strategy and pilot workload. R. Bradley and G. Bradley, pp 731-738.

The use of evacuation modelling techniques in the design of very large transport aircraft and blending wing body aircraft. E.A. Galea, S.J. Blake, S. Gwynne and P.J. Lawrence, pp 207-218.

Towards meeting VLTA challenges for evacuation slides and slide-rafts. P.D. Gosling and C.G. Riches, pp 185-199.

SHOCK WAVES

Study of unsteady characteristics of flare-induced hypersonic shock-wave boundary-layer interaction flowfield with variation in γ. S.B. Verma, pp 149-158.

Time-linearised transonic computations including entropy, vorticity and shock wave motion effects. E. Ly and J. Nakamichi, pp 687-695.

SIMULATION

Flight simulation — viability versus liability, issues of accuracy, data and validation. J. Rolfe and B.P. Hampson, pp 631-635.

Flight simulation in academia – HELIFLIGHT in its first year of operation at the University of Liverpool. G.D. Padfield and M.D. White, pp 529-538.

Simulation — the real world of the future! R.A. Curnitt, pp 369-374.

STRENGTH ANALYSIS

Buckling interaction in regular arrays of distorted hexagonal plates. C.B. York, pp 461-468.

STRUCTURES

Aircraft structures in the century ahead. A. Beukers, M. van Tooren and C. Vermeeren, pp 343-357.

Mechanical and electromagnetic behaviour of auxetic honeycomb structures. F. Scarpa, F.C. Smith, B. Chambers and G. Burriesci, pp 175-183.

SYSTEMS

Systems and avionics. P.H. Collins and B.L. Perry, pp 359-367.

The 'air side' of future warfare — military avionics. D.M. Bushnell, pp 301-305.

The human-machine partnership in UCAV operations. A.D. White, pp 111-116.

TESTING FACILITIES AND TECHNIQUES

A flight test to demonstrate flutter and evaluate the flutterometer. R. Lind, D.F. Voracek, R. Truax, T. Doyle, S. Potter and M. Brenner, pp 577-588.

Aerospace applications of luminescent paint. Part one: pressure measurement. J.R. Kingsley-Rowe, G.D. Lock and A.G. Davies, pp 637-648.

Aerospace applications of luminescent paint. Part two: heat transfer measurement. J.R. Kingsley-Rowe, G.D. Lock and A.G. Davies, pp 649-656.

UNMANNED AIR VEHICLES

Aircraft airworthiness certification standards for civil UAVs. D.R. Haddon and C.J. Whittaker, pp 79-86.

An investigation into the longitudinal dynamics and control of a flapping wing micro air vehicle at hovering flight. K. Loh, M. Cook, P. Thomasson, pp 743-753.

Biologically inspired visual sensing and flight control. G.L. Barrows, J.S. Chahl and M.V. Srinivasan, pp 159-168.

Development of a micro air vehicle. S. Watkins, pp 111-116.

Flocking of autonomous unmanned vehicles. B. Crowther, pp 99-109.

Passive mm-wave imaging from UAVs using aperture synthesis. A.R. Harvey and R. Appleby, pp 87-97.

Robotic rotorcraft. R.G. Austin, pp 65-78.

The human-machine partnership in UCAV operations. A.D. White, pp 111-116.

Velocity field path-planning for single and multiple unmanned aerial vehicles. C.R. McInnes, pp 419-426.

UNSTEADY AERODYNAMICS

Curve fitting approach for transonic flutter prediction. A. Sedaghat, J.E. Cooper, J.R. Wright and A.Y.T. Leung, pp 565-572.

Effects of sweep on the dynamics of active separation control. L.G. Pack and A. Seifert, pp 617-629.

Robustness of the subsonic doublet lattice method. L.H. van Zyl, pp 257-262.

Study of unsteady characteristics of flare-induced hypersonic shock-wave boundary-layer interaction flowfield with variation in γ. S.B. Verma, pp 149-158.

Technical Note: The effects of apex flap on the leading-edge vortex breakdown of a cropped double delta wing. J.J. Wang, J.Y. Liu and Q.S. Li, pp 739-742.

The asymptotic structure of the turbulent attachment-line boundary layer. B.W. van Oudheusden, pp 57-61.

Time-linearised transonic computations including entropy, vorticity and shock wave motion effects. E. Ly and J. Nakamichi, pp 687-695.

Turbulent mixing layer from two non-parallel streams. M.A. Azim and A.K.M.S. Islam, pp 241-249.

VIBRATION

Reduction of helicopter vibration through cyclic control of variable orifice dampers. P. Anusonti-Inthra, F. Gandhi and L. Miller, pp 657-672.

Author Index

ACKROYD, J.A.D.
The United Kingdom's contributions to the development of aeronautics, Part 4, The origins of the jet age, pp 1-47.

ALLEN, J.E. and HAMILTON, J.
Seaplane research — the MAEE contribution, pp 125-148.

ALLEN, J.E., DENNING, R.M. and ARMSTRONG, F.W.
The broad delta airliner, pp 547-558.

ANTONIA, R.A., DJENIDI, L. and SAVILL, A.M.
A numerical study of drag reduction by mini-belts in a smooth wall turbulent boundary layer, pp 559-564.

ANUSONTI-INTHRA, P., GANDHI, F. and MILLER, L.
AZIM, M.A. and ISLAM, A.K.M.S.
Turbulent mixing layer from two non-parallel streams, pp 241-249.

APPLEBY, R. and HARVEY, A.R.
Passive mm-wave imaging from UAVs using aperture synthesis, pp 87-97.

ARMSTRONG, F.W., DENNING, R.M. and ALLEN, J.E.
The broad delta airliner, pp 547-558.

ASHOK, V., KUMAR, P., CHAKRABORTY, D. and ROYCHOWDHURY, A.P.
Numerical investigation of staged transverse sonic injection in Mach 2 stream in confined environment, pp 719-729.

AUSTIN, R.G.
Robotic rotorcraft, pp 65-78.

BADCOCK, K.J., BEEDY, J., BARAKOS, G. and RICHARDS, B.E.
Non-linear analysis of stall flutter based on the ONERA aerodynamic model, pp 496-509.

BADCOCK, K.J., YANG, X. and RICHARDS, B.E.
A numerical study of hypersonic laminar film cooling, pp 479-486.

BARAKOS, G., BEEDY, J., BADCOCK, K.J. and RICHARDS, B.E.
Non-linear analysis of stall flutter based on the ONERA aerodynamic model, pp 496-509.

BARROWS, G.L., CHAHL, J.S. and SRINIVASAN, M.V.
Biologically inspired visual sensing and flight control, pp 159-168.

BEEDY, J. BARAKOS, G., BADCOCK, K.J. and RICHARDS, B.E.
Non-linear analysis of stall flutter based on the ONERA aerodynamic model, pp 496-509.

BEUKERS, A. , VAN TOOREN, M. and VERMEEREN, C.
Aircraft structures in the century ahead, pp 343-357.

BLAKE, S.J., GWYNNE, S., LAWRENCE, P.J. and GALEA, E.A.
The use of evacuation modelling techniques in the design of very large transport aircraft and blending wing body aircraft, pp 207-218.

BOGUE, D.R. and SPALART, P.R.
The role of CFD in aerodynamics, off-design, pp 323-329.

BRINDLEY, G. and BRADLEY, R.
Progress in the development of a versatile pilot model for the evaluation of rotorcraft performance, control strategy and pilot workload, pp 731-738.

BRADLEY, R. and BRINDLEY, G.
Progress in the development of a versatile pilot model for the evaluation of rotorcraft performance, control strategy and pilot workload, pp 731-738.

BRENNER, M., LIND, R., VORACEK, D.F., TRUAX, R., DOYLE, T. and POTTER, S.
A flight test to demonstrate flutter and evaluate the flutterometer, pp 577-588.

BRITTON, J.R. and JUPP, J.A.
Breaking the chain — Returning Concorde to service following the Paris accident — July 2000, pp 447-458.

BROOKER, P.
Future air traffic management: strategy and control philosophy, pp 589-598.

BROWN, L. and FILIPPONE, A.
Aerofoil at low speeds with Gurney flaps, pp 539-546.

BURRIESCI, G., SCARPA, F., SMITH, F.C. and CHAMBERS, B.
Mechanical and electromagnetic behaviour of auxetic honeycomb structures, pp 175-183.

BUSHNELL, D.M.
The 'air side' of future warfare — military avionics, pp 301-305.

BYHAM, G.M.
The future of rotorcraft, pp 377-387.

CAMERON, N., THOMSON, D.G. and MURRAY-SMITH, D.J.
Pilot modelling and inverse simulation for initial handling qualities assessment, pp 511-520.

CHAHL, J.S., SRINIVASAN, M.V. and BARROWS, G.L.
Biologically inspired visual sensing and flight control, pp 159-168.

CHAKRABORTY, D., ROYCHOWDHURY, A.P., ASHOK, V. and KUMAR, P.
Numerical investigation of staged transverse sonic injection in Mach 2 stream in confined environment, pp 719-729.

CHAMBERS, B., BURRIESCI, G., SCARPA, F. and SMITH, F.C.
Mechanical and electromagnetic behaviour of auxetic honeycomb structures, pp 175-183.

COLLINS, P.H. and PERRY, B.L.
Systems and avionics, pp 359-367.

COOK, M., THOMASSON, P. and LOH, K.
An investigation into the longitudinal dynamics and control of a flapping wing micro air vehicle at hovering flight, pp 743-753.

COONEY, D.P., GALEA, E.R., FINNEY, K.M., DIXON, A.J.P. and SIDDIQUI, A.
An analysis of human behaviour during aircraft evacuation situations using an AASK v3, 0 database, pp 219-231.

COOPER, J.E., SEDAGHAT, A., WRIGHT, J.R. and LEUNG, A.Y.T.
Curve fitting approach for transonic flutter prediction, pp 565-572.

COTON, F.N., FERRECCHIA, A., GALBRAITH, R.A.McD. and GREEN, R.B.
An investigation of dynamic stall onset on a pitching wing, pp 487-494.

CROWTHER, B.
Flocking of autonomous unmanned vehicles, pp 99-109.

CURNITT, R.A.
Simulation — the real world of the future!, pp 369-374.

DAVIES, A.G., KINGSLEY-ROWE, J.R. and LOCK, G.D.
Aerospace applications of luminescent paint, Part one: pressure measurement, pp 637-648.

DAVIES, A.G., KINGSLEY-ROWE, J.R. and LOCK, G.D.
Aerospace applications of luminescent paint, Part two: heat transfer measurement, pp 649-656.

DENNING, R.M., ALLEN, J.E. and ARMSTRONG, F.W.
The broad delta airline, pp 547-558.

DIXON, A.J.P., SIDDIQUI, A., COONEY, D.P., GALEA, E.R. and FINNEY, K.M.
An analysis of human behaviour during aircraft evacuation situations using an AASK v3, 0 database, pp 219-231.

DJENIDI, L., ANTONIA, R.A. and SAVILL, A.M.
A numerical study of drag reduction by mini-belts in a smooth wall turbulent boundary layer, pp 559-564.

DOYLE, T., POTTER, S., BRENNER, M., LIND, R., VORACEK, D.F. and TRUAX, R.
A flight test to demonstrate flutter and evaluate the flutterometer, pp 577-588.

FERRECCHIA, A., COTON, F.N., GALBRAITH, R.A.McD. and GREEN, R.B.
An investigation of dynamic stall onset on a pitching wing, pp 487-494.

FIELDING, C. and FLUX, P.K.
Non-linearities in flight control systems, pp 673-686.

FILIPPONE, A. and BROWN, L.
Aerofoil at low speeds with Gurney flaps, pp 539-546.

FILIPPONE, A. and SIQUIER, J.
Aerodynamic admittance of a two-dimensional body, pp 405-418.

FINNEY, K.M., DIXON, A.J.P., SIDDIQUI, A., COONEY, D.P. and GALEA, E.R.
An analysis of human behaviour during aircraft evacuation situations using an AASK v3, 0 database, pp 219-231.

FLOWER, H.M. and SOUTIS, C.
Materials for airframes, pp 331-341.

FLUX, P.K. and FIELDING, C.
Non-linearities in flight control systems, pp 673-686.

FOSTER, J.L. and GALLAGHER, M.
A non-traditional look at safety, pp 169-174.

GAI, S.L., HAYNE, M.J., MEE, D.J., MORGAN, R.G. and MCINTYRE, T.J.
Heat transfer and flow behind a step in high enthalpy superorbital flow, pp 435-442.

GALBRAITH, R.A.McD., FERRECCHIA, A., COTON, F.N. and GREEN, R.B.
An investigation of dynamic stall onset on a pitching wing, pp 487-494.

GALEA, E.A., BLAKE, S.J., GWYNNE, S. and LAWRENCE, P.J.
The use of evacuation modelling techniques in the design of very large transport aircraft and blending wing body aircraft, pp 207-218.

GALEA, E.R., FINNEY, K.M., DIXON, A.J.P., SIDDIQUI, A. and COONEY, D.P.
An analysis of human behaviour during aircraft evacuation situations using an AASK v3, 0 database, pp 219-231.

GALLAGHER, M. and FOSTER, J.L.
A non-traditional look at safety, pp 169-174.

GANDHI, F., MILLER, L. and ANUSONTI-INTHRA, P.
Reduction of helicopter vibration through cyclic control of variable orifice dampers, pp 657-672.

GENNARETTI, M., POLONI, L. and NITZSCHE, F.
'Smart spring' identification for hovering-rotor aeroelastic-stability augmentation, pp 233-240.

GOSLING, P.D. and RICHES, C.G.
Towards meeting VLTA challenges for evacuation slides and slide-rafts, pp 185-199.

GREEN, R.B., FERRECCHIA, A., COTON, F.N. and GALBRAITH, R.A.McD.
An investigation of dynamic stall onset on a pitching wing, pp 487-494.

GWYNNE, S., LAWRENCE, P.J., GALEA, E.A. and BLAKE, S.J.
The use of evacuation modelling techniques in the design of very large transport aircraft and blending wing body aircraft, pp 207-218.

HADDON, D.R. and WHITTAKER, C.J.
Aircraft airworthiness certification standards for civil UAVs, pp 79-86.

HAMILTON, J. and ALLEN, J.E.
Seaplane research — the MAEE contribution, pp 125-148.

HAMPSON, B.P. and ROLFE, J.
Flight simulation — viability versus liability, issues of accuracy, data and validation, pp 631-635.

HARVEY, A.R. and APPLEBY, R.
Passive mm-wave imaging from UAVs using aperture synthesis, pp 87-97.

HAYNE, M.J., MEE, D.J., MORGAN, R.G., GAI, S.L. and MCINTYRE, T.J.
Heat transfer and flow behind a step in high enthalpy superorbital flow, pp 435-442.

HOURMOUZIADIS, J. and WULFF, A.
Staged combustor optimisation in the environmental aircraft envelope, pp 263-273.

HUGHES, G., MCINNES, C.R. and MCDONALD, M.
Low cost Mercury orbiter and sample return missions using solar sail propulsion, pp 469-478.

HWANG, C.-L. and LIN, C.-L.
A dynamically fuzzy gain — scheduled design for missile autopilot, pp 599-606.

ISLAM, A.K.M.S. and AZIM, M.A.
Turbulent mixing layer from two non-parallel streams, pp 241-249.

GREEN, J.E.
Civil aviation and the environmental challenge, pp 281-299.

JAWORSKI, A.J., WATSON, M. and WOOD, N.J.
A study of synthetic jets from rectangular and dual-circular orifices, pp 427-434.

JUPP, J.A. and BRITTON, J.R.
Breaking the chain — Returning Concorde to service following the Paris accident — July 2000, pp 447-458.

KINGSLEY-ROWE, J.R., LOCK, G.D. and DAVIES, A.G.
Aerospace applications of luminescent paint, Part one: pressure measurement, pp 637-648.

KINGSLEY-ROWE, J.R., LOCK, G.D. and DAVIES, A.G.
Aerospace applications of luminescent paint, Part two: heat transfer measurement, pp 649-656.

KUMAR, P., CHAKRABORTY, D., ROYCHOWDHURY, A.P. and ASHOK, V.
Numerical investigation of staged transverse sonic injection in Mach 2 stream in confined environment, pp 719-729.

KUTSCHERA, A. and RENDER, P.M.
Technical Note: Corner speed versus optimum turn speed, pp 443-445.

LAWRENCE, B. and PADFIELD, G.D.
The birth of flight control — an engineering analysis of the Wright brothers' 1902 glider, pp 697-718.

LAWRENCE, P.J., GALEA, E.A., BLAKE, S.J. and GWYNNE, S.
The use of evacuation modelling techniques in the design of very large transport aircraft and blending wing body aircraft, pp 207-218.

LEUNG, A.Y.T., SEDAGHAT, A., COOPER, J.E. and WRIGHT, J.R.
Curve fitting approach for transonic flutter prediction, pp 565-572.

LI, Q.S., WANG, J.J. and LIU, J.Y.
Technical Note: The effects of apex flap on the leading-edge vortex breakdown of a cropped double delta wing, pp 739-742.

LIEBST, B.S. and SAAD, A.A.
Computational simulation of wing rock in three degrees-of-freedom for a generic fighter with chine-shaped forebody, pp 49-56.

LIN, C.-L and HWANG, C.-L.
A dynamically fuzzy gain — scheduled design for missile autopilot, pp 599-606.

LIND, R., VORACEK, D.F., TRUAX, R., DOYLE, T., POTTER, S. and BRENNER, M.
A flight test to demonstrate flutter and evaluate the flutterometer, pp 577-588.

LIU, J.Y., LI, Q.S. and WANG, J.J.
Technical Note: The effects of apex flap on the leading-edge vortex breakdown of a cropped double delta wing, pp 739-742.

LOCK, G.D., DAVIES, A.G. and KINGSLEY-ROWE, J.R.
Aerospace applications of luminescent paint, Part one: pressure measurement, pp 637-648.

LOCK, G.D., DAVIES, A.G. and KINGSLEY-ROWE, J.R.
Aerospace applications of luminescent paint, Part two: heat transfer measurement, pp 649-656.

LOH, K., COOK, M. and THOMASSON, P.
An investigation into the longitudinal dynamics and control of a flapping wing micro air vehicle at hovering flight., pp 743-753.

LY, E. and NAKAMICHI, J.
Time -linearised transonic computations including entropy, vorticity and shock wave motion effects, pp 687-695.

MCDONALD, M., MCINNES, C.R. and HUGHES, G.
Low cost Mercury orbiter and sample return missions using solar sail propulsion, pp 469-478.

MCINNES, C.R.
Velocity field path-planning for single and multiple unmanned aerial vehicles, pp 419-426.

MCINNES, C.R. and RADICE, G.
Autonomous behavioural algorithm for space applications, pp 521-527.

MCINNES, C.R., HUGHES, G. and MCDONALD, M.
Low cost Mercury orbiter and sample return missions using solar sail propulsion, pp 469-478.

MCINTYRE, T.J., HAYNE, M.J., MEE, D.J., MORGAN, R.G. and GAI, S.L.
Heat transfer and flow behind a step in high enthalpy superorbital flow, pp 435-442.

MEE, D.J., HAYNE, M.J., MORGAN, R.G., GAI, S.L. and MCINTYRE, T.J.
Heat transfer and flow behind a step in high enthalpy superorbital flow, pp 435-442.

MILLER, L., ANUSONTI-INTHRA, P. and GANDHI, F.
Reduction of helicopter vibration through cyclic control of variable orifice dampers, pp 657-672.

MORGAN, R.G., HAYNE, M.J., MEE, D.J., GAI, S.L. and MCINTYRE, T.J.
Heat transfer and flow behind a step in high enthalpy superorbital flow, pp 435-442.

MUIR, H. and THOMAS, L.T.
Passenger safety in very large transport aircraft, pp 201-206.

MURRAY-SMITH, D.J., CAMERON, N. and THOMSON, D.G.
Pilot modelling and inverse simulation for initial handling qualities assessment, pp 511-520.

NAKAMICHI, J. and LY, E.
Time -linearised transonic computations including entropy, vorticity and shock wave motion effects, pp 687-695.

NITZSCHE, F., GENNARETTI, M. and POLONI, L.
'Smart spring' identification for hovering-rotor aeroelastic-stability augmentation, pp 233-240.

PACK, L.G. and SEIFERT, A.
Effects of sweep on the dynamics of active separation control, pp 617-629.

PADFIELD, G.D. and LAWRENCE, B.
The birth of flight control — an engineering analysis of the Wright brothers' 1902 glider, pp 697-718.

PADFIELD, G.D. and WHITE, M.D.
Flight simulation in academia – HELIFLIGHT in its first year of operation at the University of Liverpool, pp 529-538.

PERRY, B.L. and COLLINS, P.H.
Systems and avionics, pp 359-367.

POLONI, L., NITZSCHE, F. and GENNARETTI, M.
'Smart spring' identification for hovering-rotor aeroelastic-stability augmentation, pp 233-240.

POTTER, S., BRENNER, M., LIND, R., VORACEK, D.F., TRUAX, R. and DOYLE, T.
A flight test to demonstrate flutter and evaluate the flutterometer, pp 577-588.

RADICE, G. and MCINNES, C.R.
Autonomous behavioural algorithm for space applications, pp 521-527.

RENDER, P.M. and KUTSCHERA, A.
Technical Note: Corner speed versus optimum turn speed, pp 443-445.

RICHARDS, B.E., BEEDY, J., BARAKOS, G. and BADCOCK, K.J.
Non-linear analysis of stall flutter based on the ONERA aerodynamic model, pp 496-509.

RICHARDS, B.E., YANG, X. and BADCOCK, K.J.
A numerical study of hypersonic laminar film cooling, pp 479-486.

RICHES, C.G. and GOSLING, P.D.
Towards meeting VLTA challenges for evacuation slides and slide-rafts, pp 185-199.

ROLFE, J. and HAMPSON, B.P.
Flight simulation — viability versus liability, issues of accuracy, data and validation, pp 631-635.

ROYCHOWDHURY, A.P., ASHOK, V., KUMAR, P. and CHAKRABORTY, D.
Numerical investigation of staged transverse sonic injection in Mach 2 stream in confined environment, pp 719-729.

RUFFLES, P.C.
Aero engines of the future, pp 307-321.

SAAD, A.A. and LIEBST, B.S.
Computational simulation of wing rock in three degrees-of-freedom for a generic fighter with chine-shaped forebody, pp 49-56.

SADOVNYCHIY, S.
Physical modelling of a flight control system, pp 249-255.

SAVILL, A.M., DJENIDI, L. and ANTONIA, R.A.
A numerical study of drag reduction by mini-belts in a smooth wall turbulent boundary layer, pp 559-564.

SCARPA, F., SMITH, F.C., CHAMBERS, B. and BURRIESCI, G.
Mechanical and electromagnetic behaviour of auxetic honeycomb structures, pp 175-183.

SEDAGHAT, A., COOPER, J.E., WRIGHT, J.R. and LEUNG, A.Y.T.
Curve fitting approach for transonic flutter prediction, pp 565-572.

SEIFERT, A. and PACK, L.G.
Effects of sweep on the dynamics of active separation control, pp 617-629.

SIDDIQUI, A., COONEY, D.P., GALEA, E.R., FINNEY, K.M. and DIXON, A.J.P.
An analysis of human behaviour during aircraft evacuation situations using an AASK v3, 0 database, pp 219-231.

SIQUIER, J. and FILIPPONE, A.
Aerodynamic admittance of a two-dimensional body, pp 405-418.

SMITH, F.C., CHAMBERS, B., BURRIESCI, G. and SCARPA, F.
Mechanical and electromagnetic behaviour of auxetic honeycomb structures, pp 175-183.

SOUTIS, C. and FLOWER, H.M.
Materials for airframes, pp 331-341.

SPALART, P.R. and BOGUE, D.R.
The role of CFD in aerodynamics, off-design, pp 323-329.

SRINIVASAN, M.V., BARROWS, G.L. and CHAHL, J.S.
Biologically inspired visual sensing and flight control, pp 159-168.

STOLLERY, J.
Aerospace — the challenge ahead — a special centennial celebration issue of *The Aeronautical Journal* — an introduction, pp 278-279.

THOMAS, L.T. and MUIR, H.
Passenger safety in very large transport aircraft, pp 201-206.

THOMASSON, P., LOH, K. and COOK, M.
An investigation into the longitudinal dynamics and control of a flapping wing micro air vehicle at hovering flight, pp 743-753.

THOMSON, D.
Introduction: Golden jubilee of the Department of Aerospace Engineering at the University of Glasgow, pp 460.

THOMSON, D.G., CAMERON, N. and MURRAY-SMITH, D.J.
Pilot modelling and inverse simulation for initial handling qualities assessment, pp 511-520.

TRUAX, R., DOYLE, T., POTTER, S., BRENNER, M., LIND, R. and VORACEK, D.F.
A flight test to demonstrate flutter and evaluate the flutterometer, pp 577-588.

VAN OUDHEUSDEN, B.W.
The asymptotic structure of the turbulent attachment-line boundary layer, pp 57-61.

VAN TOOREN, M., VERMEEREN, C. and BEUKERS, A.
Aircraft structures in the century ahead, pp 343-357.

VAN ZYL, L.H.
Robustness of the subsonic doublet lattice method, pp 257-262.

VERMA, S.B.
Study of unsteady characteristics of flare-induced hypersonic shock-wave boundary-layer interaction flowfield with variation in g, pp 149-158.

VERMEEREN, C., BEUKERS, A. and VAN TOOREN, M.
Aircraft structures in the century ahead, pp 343-357.

VISSER, H.G. and WIJNEN, R.A.A.
Optimisation of noise abatement arrival trajectories, pp 607-615.

VORACEK, D.F., TRUAX, R., DOYLE, T., POTTER, S., BRENNER, M. and LIND, R.
A flight test to demonstrate flutter and evaluate the flutterometer, pp 577-588.

WANG, J.J., LIU, J.Y. and LI, Q.S.
Technical Note: The effects of apex flap on the leading-edge vortex breakdown of a cropped double delta wing, pp 739-742.

WATKINS, S.
Development of a micro air vehicle, pp 111-116.

WATSON, M., JAWORSKI, A.J. and WOOD, N.J.
A study of synthetic jets from rectangular and dual-circular orifices, pp 427-434.

WELCH, A.C.
Light aviation — past, present and future, pp 389-402.

WHITE, A.D.
The human-machine partnership in UCAV operations, pp 111-116.

WHITE, M.D. and PADFIELD, G.D.
Flight simulation in academia – HELIFLIGHT in its first year of operation at the University of Liverpool, pp 529-538.

WHITTAKER, C.J. and HADDON, D.R.
Aircraft airworthiness certification standards for civil UAVs, pp 79-86.

WIJNEN, R.A.A. and VISSER, H.G.
Optimisation of noise abatement arrival trajectories, pp 607-615.

WOOD, N.J., WATSON, M. and JAWORSKI, A.J.
A study of synthetic jets from rectangular and dual-circular orifices, pp 427-434.

WRIGHT, J.R., SEDAGHAT, A., COOPER, J.E. and LEUNG, A.Y.T.
Curve fitting approach for transonic flutter prediction, pp 565-572.

WULFF, A. and HOURMOUZIADIS, J.
Staged combustor optimisation in the environmental aircraft envelope, pp 263-273.

YANG, X., BADCOCK, K.J. and RICHARDS, B.E.
A numerical study of hypersonic laminar film cooling, pp 479-486.

YORK, C.B.
Buckling interaction in regular arrays of distorted hexagonal plates, pp 461-468.

Volume CVII

Number 1067	January	pp 1-63
Number 1068	February	pp 65-123
Number 1069	March	pp 125-183
Number 1070	April	pp 185-229
Number 1071	May	pp 233-275
Number 1072	June	pp 277-403
Number 1073	July	pp 405-458
Number 1074	August	pp 460-527
Number 1075	September	pp 529-575
Number 1076	October	pp 577-635
Number 1077	November	pp 637-695
Number 1078	December	pp 697-763